|  |  |
| --- | --- |
| Minnesota Pollution Control Agency (MPCA), 520 Lafayette Road North, St. Paul, MN 55155-4194 | GI-09C  Requirements: New Source Review prevention of significant deterioration (40 CFR pt. 52.21)  Air Quality Permit Program  *Doc Type: Permit Application* |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1a)** AQ Facility ID number: | |  | **1b)** Agency Interest ID number: |  |
| **2)** Facility name: |  | | | |

**Select one of the following:**

Application is for a new permit for construction of a new facility. Complete Sections A and B. Do not complete Sections C or D**.**

Applications for a first time individual Part 70 operating permit for an existing facility that currently holds and is in compliance with an individual state permit, a registration permit, a capped permit, or a general permit. Complete Sections A and C. Do not complete Sections B, D, or E**.** Enter the current permit number here:

Application is for a first time individual state permit for an existing facility that currently holds and is in compliance with a registration permit, a capped permit, or a general permit. Complete Sections A and C. Do not complete Sections B, D, or E**.** Enter the current permit number here:

Application is for a first time individual Part 70 operating permit for an existing facility that does not currently hold any type of air quality permit; or that holds an individual state operating permit, capped permit, registration permit, or general permit and is not currently in compliance with that permit. Complete Sections A and D. Do not complete Sections B, C, or E**.** If applicable, enter the current permit number here:

Application is for a first time individual state operating permit for an existing facility that does not currently hold any type of air quality permit, or that holds a capped permit, registration permit, or general permit and is not currently in compliance with that permit. Complete Sections A and D. Do not complete Sections B, C, or E**.** If applicable, enter the current permit number here:

Application is for reissuance of an expiring Part 70 or state operating permit. Complete Sections A and E. Do not complete Sections B, C, or D.

**Use form CH-04** *instead of this form* if you are applying for an amendment to an existing operating permit.

## Section A

Throughout this form you are asked for the Potential to Emit (PTE) of your facility or of changes to your facility. The PTE values in most cases are defined as the maximum uncontrolled PTE of the emission facility. In some cases, PTE calculations may reflect factors such as control equipment or permit limitations, but **only** if (1) you are using and agree to abide by the provisions of Minn. R. 7011.0060 – 7011.0080; or (2) proof is given that such factors were federally enforceable provisions of a federally enforceable permit issued to the facility.

Is your facility defined as one or more of the following types of facility? Please check any of the types of facilities that apply. (Some, not all, Standard Industrial Classification [SIC] Code(s) applying to specific categories are given in parentheses.):

|  |  |  |  |
| --- | --- | --- | --- |
|  | Coal cleaning plants-with thermal dryers |  | Kraft pulp mills (2611, 2621) |
|  | Portland cement plants (3241) |  | Primary zinc smelters (3339) |
|  | Iron and steel mills (3312) |  | Primary aluminum ore reduction plants (3334) |
|  | Primary copper smelters (3331) |  | Municipal incinerators capable of charging more than 250 tons of refuse per day |
|  | Hydrofluoric acid plants (2819, 2899) |  | Sulfuric acid plants (2819) |
|  | Nitric acid plants (2873) |  | Petroleum refineries (2911) |
|  | Lime plants (3274) |  | Phosphate rock processing plants (1475) |
|  | Coke oven batteries (3312) |  | Sulfur recovery plants (2819) |
|  | Carbon black plants (furnace process, 2895) |  | Primary lead smelters (3339) |
|  | Fuel conversion plants |  | Sintering plants\* |
|  | Secondary metal production plants (334x, 332x) |  | Chemical process plants (28xx)\*\* |
|  | Fossil-fuel boilers (or combination thereof) totaling more than 250 MMBtu/hr heat input |  | Petroleum storage & transfer units, total storage capacity over 300,000 barrels |
|  | Taconite ore processing plants (1011) |  | Glass fiber processing plants |
|  | Charcoal production plants (2819, 2861) |  | Fossil fuel-fired steam electric plants of more than 250 MMBtu/hr heat input |

\* Processing of fine grain materials into coarser lumps, performed primarily on ores

\*\* Does not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140.

Yes. My facility is classified as one or more of the 28 sources listed above. An air emission source having PTE more than 100 tons per year (TPY) of any single regulated new source review (NSR) pollutant (except carbon dioxide equivalent (CO2e)) is considered a major stationary source. **Unless otherwise directed, for the rest of this form, 100 TPY is the threshold you must use in answering the questions for all pollutants other than CO2e**.

No. My facility is not classified as one of the 28 sources listed above. An air emission source having the potential to emit of more than 250 tpy of any single regulated NSR pollutant (except CO2e) is considered a major stationary source. **Unless otherwise directed, for the rest of this form, 250 TPY is the threshold you must use in answering the questions for all pollutants other than CO2e.**

## Section B: Construction of a new stationary source

**B1)** In Tables B1.1 and B1.2, enter the PTE (in TPY) of your entire proposed facility for each pollutant shown. (“PTE” is the maximum uncontrolled and unrestricted emissions of the emission facility. You will have a chance later to consider the use of controls.)

PM = total particulate matter PM10 = particulate matter with an aerodynamic diameter of 10 microns or less

SO2 = sulfur dioxide PM2.5 = particulate matter with an aerodynamic diameter of 2.5 microns or less

NOX = nitrogen oxides VOC = volatile organic compounds

CO = carbon monoxide Pb = lead

H2S = hydrogen sulfide MSW = municipal solid waste

MWC = municipal waste combustor

CO2 = carbon dioxide CH4= methane

N2O = nitrous oxide HFC = Hydrofluorocarbons

SF6 = sulfur hexafluoride PFC = Perfluorocarbons

Mass sum of Greenhouse Gases (GHGs) = CO2 + CH4 + N2O + HFC + PFC + SF6

CO2e = carbon dioxide equivalent, based on global warming potential of each GHG;   
refer to the Minnesota Pollution Control Agency’s (MPCA) website at <https://www.pca.state.mn.us/business-with-us/greenhouse-gas-emissions-calculations>.

**Table B1.1: “Traditional” NSR pollutants**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PM10 (includes PM2.5)** | **PM2.5** | **PM (includes PM10  & PM2.5)** | **SO2** | **NOX** | **VOC** | **CO** | **Pb** | **Fluorides** |
|  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sulfuric Acid Mist** | **H2S** | **Total reduced sulfur  (includes H2S)** | **Reduced sulfur compounds (includes H2S)** | **MWC organics** | **MWC metals** | **MWC acid gases** | **MSW landfill gases** |
|  |  |  |  |  |  |  |  |

**Table B1.2: GHG pollutants**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CO2** | **CH4** | **N2O** | **HFC** | **PFC** | **SF6** | **Mass Sum of GHGs** | **CO2e** |
|  |  |  |  |  |  |  |  |

**B2)** Is the PTE of any pollutant listed in Table B1.1 above the threshold identified in Section A, making your facility a major stationary source?

Yes. Go to question B3.

No. Done with this form. Answer “no” to question 3b on form GI-09.

**B3)** Is the potential to emit of CO2e greater than or equal to75,000 TPY?

Yes. GHGs will also be subject to regulation under NSR. Go to question B6.

No. GHGs will not be subject to regulation under NSR at this time. Go to question B6.

**B4)** [Reserved]

**B5)** [Reserved]

**B6)** In Table B6, list each pollutant for which the potential emissions listed in Table B1.1 exceeds the emission threshold identified in Section A. Also list CO2e if you answered “yes” to question B3. Then go to question B7.

**Table B6 – Pollutant status vs. major source thresholds**

|  |  |
| --- | --- |
| **Pollutants exceeding the threshold identified in Section A:** | |
|  |  |
|  |  |
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**B7)** Will you propose and accept a limit on **every** pollutant except for CO2e in Table B6 such that no major source thresholds are exceeded? (Refer to the MPCA’s website at <https://www.pca.state.mn.us/business-with-us/synthetic-minor-permit-limits> for information on how to determine and propose limits).

Yes. Go to question B8.

No. The potential emissions of at least one pollutant will exceed the associated major source threshold. Go to question B9.

**B8)** Briefly describe the limit(s) you are proposing to keep the emissions of each pollutant listed in Table B6 below its associated major source threshold. Also include these limit(s) on form CD-01, with your proposed method of demonstrating compliance. Then you are done with this form. **Attach all calculations (in both an editable spreadsheet format, and a hardcopy printout) and required documentation.** Answer “no” to question 3b on form GI-09.

|  |
| --- |
|  |

**B9)** The project is major for at least one pollutant. Review the potential emissions listed in Tables B1.1 and B1.2. In Table B9.2, list each pollutant from Table B9.1 for which the potential emissions listed in Table B1.1 or B1.2 exceeds the associated significant emission threshold (listed in Table B9.1). Then go to question B10.

**Table B9.1. Significant emission thresholds**

| **Pollutant** | **Major modification threshold (tons/year)** |
| --- | --- |
| PM10 | 15 |
| PM2.5 | 10 |
| PM | 25 |
| SO2 | 40 |
| NOX | 40 |
| Ozone (VOC) | 40 |
| CO | 100 |
| Pb | 0.6 |
| Fluorides | 3 |
| Sulfuric Acid Mist | 7 |
| H2S | 10 |
| Total reduced sulfur | 10 |
| Reduced sulfur compounds | 10 |
| MWC organics | 3.5 x 10-6 |
| MWC metals | 15 |
| MWC acid gases | 40 |
| MSW landfill gases | 50 |
| CO2e | 75,000 |

**Table B9.2 – Pollutant status vs. significant emission thresholds**

|  |  |
| --- | --- |
|  |  |
|  |  |
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|  |  |
|  |  |
|  |  |

**B10)** Will you propose and accept a limit on any pollutant in Table B9.2 such that it does not exceed its significant emission threshold? If you propose limits to restrict the emissions of all pollutants listed in Table 5 except for CO2e such that only emissions of CO2e are above the applicable threshold, then the proposed change or modification is not subject to NSR and the answer to this question is “yes”. (Refer to the MPCA website at <https://www.pca.state.mn.us/business-with-us/synthetic-minor-permit-limits> for information on determining and proposing limits.)

Yes. Go to question B11.

No. The project is major for each pollutant listed in Table B9.2. Go to question B12.

**B11)** Briefly describe the limit(s) you are proposing to keep the emissions of any pollutant listed in Table B9.2 below its significant emission rates. Also include the limit(s) on form CD-01 with your proposed method of demonstrating compliance. Go to question B12.

|  |
| --- |
|  |

**B12)** In Table B12, list all pollutants that you have determined to be subject to Prevention of Significant Deterioration (PSD). This will include each pollutant in Table B6 for which you did not propose to limit emissions below the major source threshold, and each pollutant in Table B9.2 for which you did not propose to limit emissions below the significant emission threshold. Note: a project cannot be major for CO2e emissions alone. If all other pollutants are limited to below the applicable thresholds, then the project is not major for CO2e even if emissions of CO2e exceed the threshold in Table B9.1.

**Table B12 – Pollutants subject to PSD**

|  |  |
| --- | --- |
|  |  |
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|  |  |
|  |  |

**B13)** You have now completed this form. **Attach all calculations (in both an editable spreadsheet format, and a hardcopy printout) and required documentation (as described within this form).** Go back to form GI-09 and answer “yes” to question 3b. NSR. Also complete CH-04e to identify the information needed for a PSD permit application.

**Section C: Application for a first-time individual Part 70 operating permit for an existing facility holding and in compliance with an individual state operating permit, registration permit, capped permit, or general permit; Application for a first time individual state operating permit for an existing facility holding and in compliance with a registration permit, capped permit, or general permit.**

**C1)** Are you proposing a physical change or a change in the method of operation of your facility, such that your facility will no longer qualify for the existing permit?

Yes. Go on to question C2.

No. Return to form GI-09 and answer “No, my facility is not subject to NSR requirements at this time” to question 3b. You need not complete the remainder of this section.

**C2)** In the boxes below, enter the current PTE (in tons per year) of your entire facility under each regulated NSR pollutant. (“Current PTE” means the PTE of your facility prior to receiving the permit for which you are now applying, including any restrictions imposed by the currently held registration permit, capped permit, or general permit with which the facility is in compliance.)

PM = total particulate matter PM10 = particulate matter with an aerodynamic diameter of 10 microns or less

SO2 = sulfur dioxide PM2.5 = particulate matter with an aerodynamic diameter of 2.5 microns or less

NOX = nitrogen oxides VOC = volatile organic compounds

CO = carbon monoxide Pb = lead

H2S = hydrogen sulfide MSW = municipal solid waste

MWC = municipal waste combustor

CO2 = carbon dioxide CH4= methane

N2O = nitrous oxide HFC = Hydrofluorocarbons

SF6 = sulfur hexafluoride PFC = Perfluorocarbons

Mass sum of Greenhouse Gases (GHGs) = CO2 + CH4 + N2O + HFC + PFC + SF6

CO2e = carbon dioxide equivalent, based on global warming potential of each GHG;   
refer to the MPCA website at <https://www.pca.state.mn.us/business-with-us/greenhouse-gas-emissions-calculations>.

**Table C2.1: “Traditional” NSR pollutants**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PM10 (includes PM2.5)** | **PM2.5** | **PM (includes PM10  & PM2.5)** | **SO2** | **NOX** | **VOC** | **CO** | **Pb** | **Fluorides** |
|  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sulfuric Acid Mist** | **H2S** | **Total reduced sulfur  (includes H2S)** | **Reduced sulfur compounds (includes H2S)** | **MWC organics** | **MWC metals** | **MWC acid gases** | **MSW landfill gases** |
|  |  |  |  |  |  |  |  |

**Table C2.2: GHG pollutants**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CO2** | **CH4** | **N2O** | **HFC** | **PFC** | **SF6** | **Mass Sum of GHGs** | **CO2e** |
|  |  |  |  |  |  |  |  |

**C3)** [Reserved]

**C4)** For any pollutant in Table C2.1, is the current federally enforceable PTE of your facility greater than or equal to the threshold identified in Section A?

Yes. Go to question C5.

No. Go to question C6.

**C5) For CO2e in Table C2.2,** is the current federally enforceable PTE of your facility greater than or equal to 75,000 TPY?

Yes. Go to question C6.

No. Go to question C6.

**C6)** Synthetic Minor Source: Are you proposing a federally enforceable limit such that the **entire facility** will become or remain a minor source under New Source Review?

Yes. Return to form GI-09 and answer “No, my facility is not subject to NSR requirements at this time” to question 3b. You are done with this form. Refer to the MPCA’s website at <https://www.pca.state.mn.us/business-with-us/synthetic-minor-permit-limits> for guidance on setting limits. Put proposed limits and proposed compliance demonstration on form CD-01.

No. If you answered “yes” to question C4 or question C5, complete form CH-04a, then go on to question C7.  
If you answered “no” to question C4 or question C5, complete form CH-04b, then go on to question C7.

**C7)** After completing form CH-04a or CH-04b, and all other forms as directed therein, is your proposed change or modification subject to New Source Review?

Yes. Answer “Yes, my facility is subject to NSR requirements for a change I am proposing to make at this time” to question 3b on form GI-09.

No. Answer “No, my facility is not subject to NSR requirements at this time” to question 3b on form GI-09.

**Section D: Application for a first-time individual Part 70 operating permit for an existing facility not holding a current permit, or holding but not in compliance with an individual state operating permit, registration permit, capped permit, or general permit; Application for a first time individual state operating permit for an existing facility not holding a current permit, or holding but not in compliance with a registration permit, capped permit, or general permit.**

**D1)** In the boxes below, enter the current PTE (in tons per year) of your entire facility under each regulated NSR pollutant. (“Current PTE” means the PTE of your facility prior to receiving the permit for which you are now applying. Do not include restrictions imposed by a currently held registration permit, capped permit, or general permit with which the facility is not in compliance.)

PM = total particulate matter PM10 = particulate matter with an aerodynamic diameter of 10 microns or less

SO2 = sulfur dioxide PM2.5 = particulate matter with an aerodynamic diameter of 2.5 microns or less

NOX = nitrogen oxides VOC = volatile organic compounds

CO = carbon monoxide Pb = lead

H2S = hydrogen sulfide MSW = municipal solid waste

MWC = municipal waste combustor

CO2 = carbon dioxide CH4= methane

N2O = nitrous oxide HFC = Hydrofluorocarbons

SF6 = sulfur hexafluoride PFC = Perfluorocarbons

Mass sum of Greenhouse Gases (GHGs) = CO2 + CH4 + N2O + HFC + PFC + SF6

CO2e = carbon dioxide equivalent, based on global warming potential of each GHG;   
refer to the MPCA website at <https://www.pca.state.mn.us/business-with-us/greenhouse-gas-emissions-calculations>.

**Table D1.1: “Traditional” NSR pollutants**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PM10 (includes PM2.5)** | **PM2.5** | **PM (includes PM10  & PM2.5)** | **SO2** | **NOX** | **VOC** | **CO** | **Pb** | **Fluorides** |
|  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sulfuric Acid Mist** | **H2S** | **Total reduced sulfur  (includes H2S)** | **Reduced sulfur compounds (includes H2S)** | **MWC organics** | **MWC metals** | **MWC acid gases** | **MSW landfill gases** |
|  |  |  |  |  |  |  |  |

**Table D1.2: GHG pollutants**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CO2** | **CH4** | **N2O** | **HFC** | **PFC** | **SF6** | **Mass Sum of GHGs** | **CO2e** |
|  |  |  |  |  |  |  |  |

**D2)** Are you proposing a physical change or a change in the method of operation of your facility at this time?

Yes. Go to question D5.

No. Go on to question D3.

**D3)** Is the current federally enforceable PTE of your existing facility greater than or equal to the threshold identified in Section A, for any pollutant in Table D1.1?

Yes. Go to question D9.

No. Return to form GI-09 and answer “No, my facility is not subject to NSR requirements at this time” to question 3b. You need not complete the remainder of this section.

**D4)** [Reserved]

**D5)** Is the current federally enforceable PTE of your **existing** facility greater than or equal to the threshold identified in Section A for any pollutant in Table D1.1?

Yes. Complete form CH-04a, then go on to question D7.

No. Complete form CH-04b, then go on to question D7.

**D6)** [Reserved]

**D7)** After completing form CH-04a or CH-04b, and all other forms as directed therein, is your proposed change or modification subject to New Source Review?

Yes. If you answered “yes” to question D5, go to question D9; otherwise go to question D8.

No. If you answered “yes” to question D5, go to question D9; otherwise go to questionD8.

**D8)** Did you answer “Yes” to question D7?

Yes. Return to form GI-09 and answer “Yes, my facility is subject to NSR requirements for a change I am proposing to make at this time” to question 3b. You need not complete the remainder of this section.

No. Return to form GI-09 and answer “No, my facility is not subject to NSR requirements at this time” to question 3b, then continue completing form GI-09. You need not complete the remainder of this section.

**D9)** Since August 7, 1980, have the **actual emissions** from your facility of the pollutants listed in Table D1.1 ever exceeded the threshold identified in Section A for your facility?

Yes. Go to question D11.

No. Go to question D10.

**D10)** The **actual emissions** from your facility have never exceeded the threshold established for your facility in Section A. Would you be willing to accept federally enforceable permit limitations to limit potential emissions from your entire facility to less than the thresholds in Section A?

No. Go to question D13.

Yes. You are required to specify these limitations (called synthetic minor limits) for your facility. These limitations will limit your air emissions. This will be dependent on your emission sources and can have some flexibility. Briefly describe what limitations you would be willing to accept and abide by. Refer to the MPCA’s website at <https://www.pca.state.mn.us/business-with-us/synthetic-minor-permit-limits> for guidance in establishing these limitations. Include the specific limits, monitoring, recordkeeping, and reporting on form CD-01. Return to form GI-09 and answer “No” to question 3b, then continue completing form GI-09. You need not complete the remainder of this section.

|  |
| --- |
|  |

**D11)** Have you removed any equipment from your facility since the **actual emissions** exceeded the threshold identified in Section A?

Yes. Go to question D12.

No. Go to question D13.

**D12)** Have the actual emissions from the facility of the pollutants listed in Table D1.1 remained under the thresholds identified in Section A for the last two years and have actual CO2e emissions remained under 75,000 TPY?

Yes. It may be possible to obtain a synthetic minor permit for your facility. Go on to question D13. If you wish to pursue a synthetic minor permit for your facility, contact Steve Pak at 651-757-2633 to discuss the possibility.

No. Go to question D13.

**D13)** Was the facility constructed after August 7, 1980?

No. Go to question D16.

Yes. Construction on my facility began on (date *mm/dd/yyyy*):

The PTE of my facility (in tons per year) when constructed was:

**Table D13.1: “Traditional” NSR pollutants**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PM10 (includes PM2.5)** | **PM2.5** | **PM (includes PM10  & PM2.5)** | **SO2** | **NOX** | **VOC** | **CO** | **Pb** | **Fluorides** |
|  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sulfuric Acid Mist** | **H2S** | **Total reduced sulfur  (includes H2S)** | **Reduced sulfur compounds (includes H2S)** | **MWC organics** | **MWC metals** | **MWC acid gases** | **MSW landfill gases** |
|  |  |  |  |  |  |  |  |

The potential of my facility to emit CO2e, when constructed, was       TPY.

**D14)** Are any of the PTE values entered in Table D13 greater than the threshold from Section A for your facility? You do not need to consider the PTE values for CO2e when answering this question.

Yes. Go to question D14b.

No. Go to question D16.

**D14b)** Is the PTE value for CO2e greater than 75,000 tons per year for your facility?

Yes. Go to question D15.

No. Go to question D15.

**D15)** Compare the actual emissions (of the pollutants listed in Table D13 from the equipment originally installed at the facility to the threshold from Section A; compare actual CO2e emissions to 75,000 TPY. Have the actual emissions of any pollutant ever exceeded the associated threshold for any year after the construction date or the effective date for that pollutant (shown in item D16ei), whichever is later?

Yes. My facility was a major source when it was constructed. If a Best Available Control Technology (BACT)/Lowest Achievable Emission Rates (LAER) analysis was not done at the time of construction and has not been done since, the facility may be subject to backward looking NSR. To do the analysis, follow the procedures shown in form CH-04e. Contact Steve Pak at 651-757-2633 for additional guidance. Go on to question D16.

No. Go on to question D16.

**D16)** Has the facility been modified or changed since August 7, 1980?

No. Return to form GI-09 to answer question 3b and continue with that form. It is not necessary to complete the rest of this form.

Yes. NSR groups changes made during the same budget or planning period as a single modification. This means that changes need to be grouped together based on budgeting or planning periods and evaluated as one modification to determine if NSR/PSD applies to the changes that have been made.

Questions D16a through D16g need to be completed for **each** modification made at your facility (exclude any modifications you are proposing in this application, since that has already been covered). Begin with the first modification after the PTE of your facility exceeded the threshold from Section A, or the first modification made after August 7, 1980, whichever is later.

**Do not include:** Modifications which were authorized by a permit from the MPCA. Duplicate and add additional pages as necessary. (Note: if your facility was under the threshold identified in question 1 and the first modification you made was over that threshold, provide the information listed in questions D16a, b, c, d, e, and f on a separate sheet of paper.)

**D16a)** Describe the physical change in or change in method of operation to your facility:

|  |
| --- |
|  |

**D16b)** In what year(s) did the modification occur?

**D16c)** List the potential emissions increase (in tons per year) of each pollutant for this modification.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PM10 (includes PM2.5)** | **PM2.5** | **PM (includes PM10  & PM2.5)** | **SO2** | **NOX** | **VOC** | **CO** | **Pb** | **Fluorides** |
|  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sulfuric Acid Mist** | **H2S** | **Total reduced sulfur (includes H2S)** | **Reduced sulfur compounds (includes H2S)** | **MWC organics** | **MWC metals** | **MWC acid gases** | **MSW landfill gases** | **CO2e** |
|  |  |  |  |  |  |  |  |  |

**D16d)** Are the values you entered in question D16c for this modification greater than the values listed in question D16ei for any regulated NSR pollutant?

Yes. Go to question D16ei.

No. This was a minor change, go to question D16g.

**D16ei)** Now consider the actual emissions from the equipment associated with this modification. Beginning with the year entered in question D16b or the effective date of the pollutant listed in the table below, whichever is later, have these actual emissions ever exceeded the values listed in the following table?

|  |  |  |
| --- | --- | --- |
| **Pollutant** | **Threshold (tons/year)** | **Effective date** |
| PM10 | 15 | July 31, 1987 |
| PM2.5 | 10 | July 15, 2008 |
| PM | 25 | August 7, 1980 |
| SO2 | 40 | August 7, 1980 |
| NOX | 40 | August 7, 1980 |
| Ozone (VOC) | 40 | August 7, 1980 |
| CO | 100 | August 7, 1990 |
| Pb | 0.6 | August 7, 1980 |
| Fluorides | 3 | August 7, 1980 |
| Sulfuric Acid Mist | 7 | August 7, 1980 |
| H2S | 10 | August 7, 1980 |
| Total reduced sulfur | 10 | August 7, 1980 |
| Reduced sulfur compounds | 10 | August 7, 1980 |
| MWC organics | 3.5 x 10-6 | August 12, 1991 |
| MWC metals | 15 | August 12, 1991 |
| MWC acid gases | 40 | August 12, 1991 |
| MSW landfill gases | 50 | March 12, 1996 |

Yes. This modification is subject to backward looking NSR, unless a BACT/LAER analysis was done at the time of modification. (If analysis was not done at the time of modification, but has been done since then, it may not be necessary to repeat it.) Contact Steve Pak at 651-757-2633 for additional guidance. Go to question D16eii.

No. Go to question D16eii.

**D16eii)** Considering the actual emissions from the equipment associated with this modification. Beginning with the year entered in question D16b or January 2, 2011, whichever is later, have actual emissions of CO2e ever exceeded 75,000 tons/year?

Yes. This modification is subject to backward looking NSR for CO2e, unless a BACT/LAER analysis was done at the time of modification. (If an analysis was not done at the time of modification, but has been done since then, it may not be necessary to repeat it.) Contact Steve Pak at 651-757-2633 for additional guidance. Go to question D16g.

No. Go to question D16f.

**D16f)** The actual emissions from this modification have never exceeded the levels listed in question D16ei. Are you willing to accept federally enforceable permit limitations to limit the potential emissions increase of the modification to less than those levels?

Yes. You are required to specify limitations (called “synthetic minor” limits) for this change. These limits will limit your air emissions to below the levels listed in question D16ei. This will be dependent on your emissions sources and can have some flexibility. Briefly describe below what limitations you would be willing to accept and abide by. Refer to the MPCA’s website at <https://www.pca.state.mn.us/business-with-us/synthetic-minor-permit-limits> for guidance in establishing these limitations. Include the specific limits, monitoring, recordkeeping, and reporting on form CD-01. Go to question D16g.

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No. This modification is subject to backward looking NSR. Go to question D16g.

**D16g)** Repeat the items listed in question D16 until each non-permitted physical change or change in method of operation to your facility has been identified, duplicating question D16 as necessary.

**D17)** It may be possible to accept synthetic minor permit limitations if your actuals have exceeded the threshold levels, if you have removed equipment and the actual emissions for the last two calendar years of operation have remained under the threshold levels. You should contact the MPCA for more guidance on whether your facility qualifies for synthetic minor limitations.

If you have triggered NSR/PSD levels and cannot or choose not to accept synthetic minor limitations, you need to check **Yes** to question 3b on form GI-09. If your facility has received permits for modifications or completed NSR/PSD reviews as requested by the MPCA, you should work with MPCA staff to determine the compliance status of your facility regarding NSR/PSD and establishing limits.

## Section E – Application for reissuance of an expiring Part 70 or state operating permit

**E1)** In the boxes below, enter the current permitted PTE (in TPY) of your entire facility under each regulated NSR pollutant.

PM = total particulate matter PM10 = particulate matter with an aerodynamic diameter of 10 microns or less

SO2 = sulfur dioxide PM2.5 = particulate matter with an aerodynamic diameter of 2.5 microns or less

NOX = nitrogen oxides VOC = volatile organic compounds

CO = carbon monoxide Pb = lead

H2S = hydrogen sulfide MSW = municipal solid waste

MWC = municipal waste combustor

CO2 = carbon dioxide CH4= methane

N2O = nitrous oxide HFC = Hydrofluorocarbons

SF6 = sulfur hexafluoride PFC = Perfluorocarbons

Mass sum of Greenhouse Gases (GHGs) = CO2 + CH4 + N2O + HFC + PFC + SF6

CO2e = carbon dioxide equivalent, based on global warming potential of each GHG;   
refer to the MPCA website at <https://www.pca.state.mn.us/business-with-us/greenhouse-gas-emissions-calculations>.

**Table E1.1: “Traditional” NSR pollutants**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PM10 (includes PM2.5)** | **PM2.5** | **PM (includes PM10  & PM2.5)** | **SO2** | **NOX** | **VOC** | **CO** | **Pb** | **Fluorides** |
|  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sulfuric Acid Mist** | **H2S** | **Total reduced sulfur  (includes H2S)** | **Reduced sulfur compounds (includes H2S)** | **MWC organics** | **MWC metals** | **MWC acid gases** | **MSW landfill gases** |
|  |  |  |  |  |  |  |  |

**Table E1.2: GHG pollutants**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CO2** | **CH4** | **N2O** | **HFC** | **PFC** | **SF6** | **Mass Sum of GHGs** | **CO2e** |
|  |  |  |  |  |  |  |  |

**E2)** Is the current permitted PTE of your existing facility greater than or equal to the threshold identified in Section A, for any pollutant in Table E1.1?

Yes. Go to question E3.

No. Return to form GI-09 and answer “No, my facility is not subject to NSR requirements at this time” to question 3b. You need not complete the remainder of this section.

**E3)** For each new or modified unit or process listed in Question 3 on form CH-01-R for which a permit amendment application or notification was not submitted, answer the following questions. Make additional copies or attach additional pages to describe more than one change that was made.

**E3a)** Describe the physical change in or change in method of operation that occurred:

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**E3b)** In what year(s) did the change/modification occur?

**E3c)** List the potential emissions increase (in TPY) of each pollutant for this change/modification.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PM10 (includes PM2.5)** | **PM2.5** | **PM (includes PM10  & PM2.5)** | **SO2** | **NOX** | **VOC** | **CO** | **Pb** | **Fluorides** |
|  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sulfuric Acid Mist** | **H2S** | **Total reduced sulfur  (includes H2S)** | **Reduced sulfur compounds (includes H2S)** | **MWC organics** | **MWC metals** | **MWC acid gases** | **MSW landfill gases** | **CO2e** |
|  |  |  |  |  |  |  |  |  |

**E3di)** Are the values you entered in question E3c for this modification greater than the values listed in question E3e for any regulated NSR pollutant?

Yes. Go to question E3dii.

No. This was a minor change, go to question E3g.

**E3dii)** Is the value you entered in question E3c for this modification greater than 75,000 tons/year for CO2e?

Yes. Go to questions E3ei.

No. Go to question E3ei. Skip question E3eii.

**E3ei)** Now consider the actual emissions from the equipment associated with this change/modification. Beginning with the year entered in question E3b or the effective date of the pollutant listed in the table below, whichever is later, have these actual emissions ever exceeded any of the values listed in the following table?

|  |  |  |
| --- | --- | --- |
| **Pollutant** | **Threshold (tons/year)** | **Effective date** |
| PM10 | 15 | July 31, 1987 |
| PM2.5 | 10 | July 15, 2008 |
| PM | 25 | August 7, 1980 |
| SO2 | 40 | August 7, 1980 |
| NOX | 40 | August 7, 1980 |
| Ozone (VOC) | 40 | August 7, 1980 |
| CO | 100 | August 7, 1990 |
| Pb | 0.6 | August 7, 1980 |
| Fluorides | 3 | August 7, 1980 |
| Sulfuric Acid Mist | 7 | August 7, 1980 |
| H2S | 10 | August 7, 1980 |
| Total reduced sulfur | 10 | August 7, 1980 |
| Reduced sulfur compounds | 10 | August 7, 1980 |
| MWC organics | 3.5 x 10-6 | August 12, 1991 |
| MWC metals | 15 | August 12, 1991 |
| MWC acid gases | 40 | August 12, 1991 |
| MSW landfill gases | 50 | March 12, 1996 |

Yes. This change/modification is subject to backward looking NSR. Go to question E3eii.

No. Go to question E3f.

**E3eii) Now consider the actual emissions of CO2e from the equipment associated with this change/modification. Beginning with the year entered in question E3b or January 2, 2011, whichever is later, have the actual emissions ever exceeded 75,000 tons/year?**

Yes. This change/modification is subject to backward looking NSR for CO2e. Go to question E3g.

No. Go to question E3f.

**E3f)** The actual emissions from this modification have never exceeded the levels listed in question E3e. Are you willing to accept federally enforceable permit limitations to limit the potential emissions increase of the modification to less than those levels?

No. This change/modification is subject to backward looking NSR. Go to question E3g.

Yes. You are required to specify limitations (called “synthetic minor” limits) for this change. These limits will limit your air emissions to below the levels listed in question E3e. This will be dependent on your emissions sources and can have some flexibility. Briefly describe below what limitations you would be willing to accept and abide by. Refer to the MPCA website at <https://www.pca.state.mn.us/business-with-us/synthetic-minor-permit-limits> for guidance in establishing these limitations. Include the specific limits, monitoring, recordkeeping, and reporting on form CD-01. Go to question E3g.

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|  |

**E3g)** Repeat the items listed in question E3 each new or modified unit or process listed in Question 3 on form CH-01-R for which a permit amendment application or notification was not submitted, duplicating question E3 as necessary.

**E4)** It may be possible to accept synthetic minor permit limitations if your actuals have exceeded the threshold levels, if you have removed equipment and the actual emissions for the last two calendar years of operation have remained under the threshold levels. You should contact the MPCA for more guidance on whether your facility qualifies for synthetic minor limitations.

If you have triggered NSR/PSD levels and cannot or choose not to accept synthetic minor limitations, you need to check **Yes** to question 3b on form GI-09. If your facility has received permits for modifications or completed NSR/PSD reviews as requested by the MPCA, you should work with MPCA staff to determine the compliance status of your facility regarding NSR/PSD and establishing limits.